CLAIMS

1. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing 0.01 to 20 parts by weight of an aromatic compound having at least two aromatic rings relative to 100 parts by weight of a cellulose acylate,

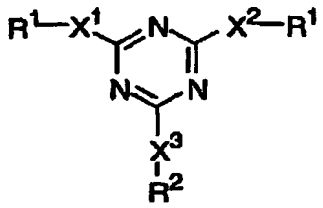
a step of casting the cellulose acylate solution on a band or a drum; and

a step of blowing a gas on the cast cellulose acylate solution at an effective wind speed of at least 10m/min during a first half of drying prior to peel-off.

2. The process for producing a cellulose acylate film according to Claim 1, wherein the degree of acylation of the cellulose acylate is in the range of 59.0% to 61.5%.

3. The process for producing a cellulose acylate film according to Claim 1 or 2, wherein the aromatic compound is a compound represented by Formulae (I) to (IV) below:

Formula (I)

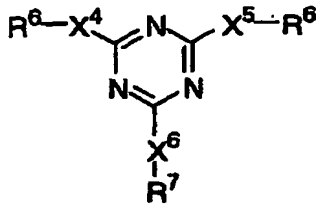


in Formula (I);

R^1 denotes an aromatic ring or a hetero ring having a substituent at the ortho position and/or the meta position, and R^2 denotes an aromatic ring or a hetero ring which may be substituted.

X^1 denotes a single bond or $-NR^3-$, X^2 denotes a single bond or $-NR^4-$, and X^3 denotes a single bond or $-NR^5-$; R^3, R^4, and R^5 independently denote a hydrogen atom, or a substituted or unsubstituted alkyl group, alkenyl group, aryl group, or heterocyclic group;

Formula (II)

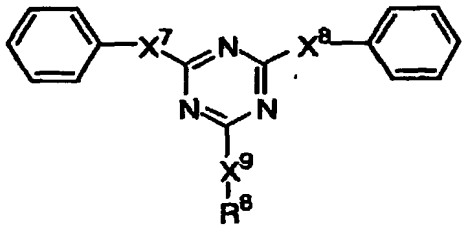


in Formula (II);

R^6 denotes an aromatic ring or a hetero ring having a substituent at the para position, and R^7 denotes an aromatic ring or a hetero ring having a substituent, provided that when R^6 and R^7 denote aromatic rings, both are not identical;

X^4 denotes a single bond or $-NR^{13}-$, X^5 denotes a single bond or $-NR^{14}-$, and X^6 denotes a single bond or $-NR^{15}-$; R^{13}, R^{14}, and R^{15} independently denote a hydrogen atom, or a substituted or unsubstituted alkyl group, alkenyl group, aryl group, or heterocyclic group;

Formula (III)

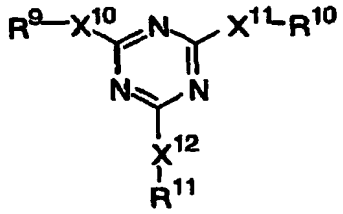


in Formula (III);

R^8 denotes an aromatic ring or a hetero ring having a substituent at the ortho position and/or the meta position;

X^7 denotes a single bond or $-NR^{23}-$, X^8 denotes a single bond or $-NR^{24}-$, and X^9 denotes a single bond or $-NR^{25}-$; R^{23}, R^{24}, and R^{25} independently denote a hydrogen atom, or a substituted or unsubstituted alkyl group, alkenyl group, aryl group, or heterocyclic group;

Formula (IV)



in Formula (IV);

R^9, R^{10}, and R^{11} denote different aromatic rings or hetero rings, which may be substituted;

X^{10} denotes a single bond or $-NR^{33}-$, X^{11} denotes a single bond or $-NR^{34}-$, and X^{12} denotes a single bond or $-NR^{35}-$; R^{33}, R^{34}, and R^{35} independently denote a hydrogen atom, or a substituted or unsubstituted alkyl group, alkenyl group, aryl group, or heterocyclic group.

4. The process for producing a cellulose acylate film according to any one of Claims 1 to 3, wherein the retardation value Re of the cellulose acylate film calculated from the equation below is in the range of 0 to 100 nm:

Retardation value Re = (nx - ny) × d

(here, nx denotes the refractive index in the direction of the phase retardation axis within the film (direction in which the refractive index is maximum), ny denotes the refractive index in the direction of the phase advance axis within the film (direction in which the refractive index is minimum), and d denotes the thickness (nm) of the film).

5. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing a cellulose acylate, a functional additive, a first organic solvent, and a second organic solvent, the solubilities of the functional additive in the first organic solvent and the second organic solvent being different;

a step of casting the cellulose acylate solution on a band or a drum; and

a step of drying the cast cellulose acylate solution so as to remove the

organic solvents therefrom; wherein

the solvent composition of mixed organic solvent in the cast cellulose acylate solution changes during the drying step, and

when S1(25) (solids weight concentration of the functional additive) is the solubility of the functional additive at 25°C in the mixed organic solvent having a solvent composition where the proportion by weight of the first organic solvent, in which the solubility of the functional additive is the lowest, is the highest in the mixed organic solvent, and S0(25) (solids weight concentration of the functional additive) is the solubility of the functional additive at 25°C in the mixed organic solvent of the solvent composition in the step of preparing the cellulose acylate solution, then for the cellulose acylate solution that is cast,

$0 \leq S0(25) - S1(25) < 12.5$ or

$S1(25)/S0(25) \geq 0.5$.

6. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing a cellulose acylate, a functional additive, a first organic solvent, and a second organic solvent, the solubilities of the functional additive in the first organic solvent and the second organic solvent being different;

a step of casting the cellulose acylate solution on a band or a drum; and

a step of drying the cast cellulose acylate solution so as to remove the organic solvents therefrom; wherein

the solvent composition of mixed organic solvent in the cast cellulose acylate solution changes during the drying step, and

when S1(20) (solids weight concentration of the functional additive) is the solubility of the functional additive at 20°C in the mixed organic solvent having a solvent composition where the proportion by weight of the first organic solvent, in which the solubility of the functional additive is the lowest, is the highest in the mixed organic solvent, and S0(20) (solids weight concentration of the functional

additive) is the solubility of the functional additive at 20°C in the mixed organic solvent of the solvent composition in the step of preparing the cellulose acylate solution, then for the cellulose acylate solution that is cast,

$0 \leq S0(20) - S1(20) < 12.5$ or

$S1(20)/S0(20) \geq 0.5$.

7. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing a cellulose acylate, a functional additive, a first organic solvent, and a second organic solvent, the solubilities of the functional additive in the first organic solvent and the second organic solvent being different;

a step of casting the cellulose acylate solution on a band or a drum; and

a step of drying the cast cellulose acylate solution so as to remove the organic solvents therefrom; wherein

the solvent composition of the mixed organic solvent in the cast cellulose acylate solution changes during the drying step, and

when S1(35) (solids weight concentration of the functional additive) is the solubility of the functional additive at 35°C in the mixed organic solvent having a solvent composition where the proportion by weight of the first organic solvent, in which the solubility of the functional additive is the lowest, is the highest in the mixed organic solvent, and S0(35) (solids weight concentration of the functional additive) is the solubility of the functional additive at 35°C in the mixed organic solvent of the solvent composition in the step of preparing the cellulose acylate solution, then for the cellulose acylate solution that is cast,

$0 \leq S0(35) - S1(35) < 12.5$ or

$S1(35)/S0(35) \geq 0.5$.

8. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing a cellulose acylate (a), an additive (b) selected from the group consisting of a plasticizer, a

retardation control agent, a degradation inhibitor, and a UV absorbing agent, and an organic solvent or a mixed organic solvent (c);

a step of casting the cellulose acylate solution on a band or a drum; and

a step of drying the cast cellulose acylate solution so as to remove the organic solvent therefrom; wherein

for the cellulose acylate solution that is cast, the heat of solution ΔH0 of the additive (b) in the organic solvent or mixed organic solvent (c) is larger than the heat of solution ΔHs thereof in a solution in which only the cellulose acylate (a) is dissolved, and ΔH0 - ΔHs is 0.3 kcal/mol or more.

9. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing a cellulose acylate (a), an additive (b') selected from the group consisting of a retardation control agent, a degradation inhibitor, and a UV absorbing agent, a plasticizer (b1), and an organic solvent or a mixed organic solvent (c);

a step of casting the cellulose acylate solution on a band or a drum; and

a step of drying the cast cellulose acylate solution so as to remove the organic solvent therefrom; wherein

for the cellulose acylate solution that is cast, the heat of solution ΔH0 of the additive (b') in the organic solvent or mixed organic solvent (c) is larger than the heat of solution ΔHs thereof in a solution in which the plasticizer (b1) alone is dissolved, and ΔH0 - ΔHs is 0.3 kcal/mol or more.

10. A process for producing a cellulose acylate film, the process comprising:

a step of preparing a cellulose acylate solution containing a cellulose acylate (a), an additive (b') selected from the group consisting of a retardation control agent, a degradation inhibitor, and a UV absorbing agent, a plasticizer (b1), and an organic solvent or a mixed organic solvent (c);

a step of casting the cellulose acylate solution on a band or a drum; and

a step of drying the cast cellulose acylate solution so as to remove the

organic solvent therefrom; wherein

for the cellulose acylate solution that is cast, the heat of solution ΔH0 of the additive (b') in the organic solvent or mixed organic solvent (c) is larger than the heat of solution ΔHs thereof in a solution in which the cellulose acylate (a) and the plasticizer (b1) are dissolved, and ΔH0 - ΔHs is 0.3 kcal/mol or more.

11. The process for producing a cellulose acylate film according to any one of Claims 8 to 10, wherein the difference ΔH0 - ΔHs of the heats of solution is 0.6 kcal/mol or more.

12 A process for producing a cellulose acylate film, wherein the cellulose acylate solution according to any one of Claims 1 to 11 is cast as an outermost layer.

13. A cellulose acylate film produced by the process according to any one of Claims 1 to 12.

14. An optical compensation film employing a cellulose acylate film produced by the process according to any one of Claims 1 to 12.

15. An optical compensation sheet provided with an optically anisotropic layer formed from a liquid crystal molecule on the cellulose acylate film according to Claim 13.

16. An optical compensation film employing a cellulose acylate film produced by the production process according to any one of Claims 5 to 12 wherein the additive is an aromatic compound having at least two aromatic rings, and the aromatic compound having at least two aromatic rings is contained at 0.01 to 20 parts by weight relative to 100 parts by weight of the cellulose acylate.

17. A polarizing plate comprising a transparent protective film, a polarizing film, a transparent support, and an optically anisotropic layer formed from a liquid crystal molecule laminated in that order, wherein the transparent support is the cellulose acylate film according to Claim 13.

18. An image display device employing at least one of the optical

compensation film according to Claims 15 or 16 and the polarizing plate according to Claim 17.

19. A liquid crystal display device comprising a liquid crystal cell, and two polarizing plates disposed on either side thereof, at least one of the polarizing plates being the polarizing plate of Claim 17.